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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,336	11/13/2001	Chaitanya S. Rajguru	10559-519001 / P12423	5776
20985 7:	590 02/24/2004	EXAMINER		INER
FISH & RICHARDSON, PC		DESTA, ELIAS		
12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			ART UNIT	PAPER NUMBER
DAIL DIEGO,	011 72130 2001		2857	

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Advisory Action	09/993,336	RAJGURU, CHAITANYA S.
Advisory Addion	Examiner	Art Unit
	Elias Desta	2857
The MAILING DATE of this communication appe	ars on the cover sheet with the o	orrespondence address
THE REPLY FILED 04 November 2003 FAILS TO PLAC Therefore, further action by the applicant is required to avinal rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114.	roid abandonment of this applica a timely filed amendment whicl (with appeal fee); or (3) a timel	ation. A proper reply to a name application in
•	PLY [check either a) or b)]	
a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The ee have been filed is the date for purposes of determining the period of the under 37 CFR 1.17(a) is calculated from: (1) the expiration date of 12) as set forth in (b) above, if checked. Any reply received by the Office	Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF THE date on which the petition under 37 CF of extension and the corresponding amount the shortened statutory period for reply the later than three months after the main	g date of the final rejection. HE FINAL REJECTION. See MPEP R 1.136(a) and the appropriate extension unt of the fee. The appropriate extension originally set in the final Office action; or
imely filed, may reduce any earned patent term adjustment. See 37 C 1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFF	Brief must be filed within the per R 1.191(d)), to avoid dismissal o	eriod set forth in f the appeal.
2. The proposed amendment(s) will not be entered be		
(a) they raise new issues that would require further	er consideration and/or search (see NOTE below);
(b) they raise the issue of new matter (see Note b		
(c) they are not deemed to place the application in issues for appeal; and/or		
(d) they present additional claims without canceli	ng a corresponding number of f	nally rejected claims.
NOTE:		
3. Applicant's reply has overcome the following reject		
 Newly proposed or amended claim(s) would canceling the non-allowable claim(s). 	be allowable if submitted in a se	eparate, timely filed amendment
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because: Se		dered but does NOT place the
6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection.	ause it is not directed SOLELY t	o issues which were newly
7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we		
The status of the claim(s) is (or will be) as follows:		
Claim(s) allowed:		
Claim(s) objected to:		
Claim(s) rejected:		
Claim(s) withdrawn from consideration:		
8.⊠ The drawing correction filed on <u>17 July 2003</u> is a)∑	☑ approved or b)☐ disapprov	ed by the Examiner.
9. Note the attached Information Disclosure Statemer	nt(s)(PTO-1449) Paper No(s)	
10. Other:		MARC S. HORF SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Continuation of 5. does NOT place the application in condition for allowance because: The amended claims are incorporating the canceled dependent claims limitation without including any distinguishing elements from the previous argument.

The Examiner believes that in reference to claim 1, 7, 13, 19 and 20: as discussed in Kawahara et al., Fig. 1 and page 127, paragraph 2 provides a means to measure an actual capacity of the charge pump and to reset the capacity of the charge pump to a value based on the measured capacity. Further, the system implements an accurate reference voltage, which provides a means to control the values of the charge pump capacity.

Kawahara et al. provides two charge pump voltages (VH and VP) to control the programming and erasing speed of the flash memory (see Kawahara et al., page 127, 1st column and 2nd paragraph). These voltages are controlled using a reference voltage to achieve the required value (see page 127, 2nd column, 3rd paragraph). Also Kawahara et al. in Fig. 1 shows that the output of the charge pumps is measured in pico farad (pF) (see page 127, 1st column, 1st paragraph, starting 3rd line). In Fig. 6(a), the charge pump is provided with a measuring circuit that enables the system to monitor the charge pump based the reference voltage because the reference voltage is connected to CR of known value. The capacitance value, as discussed in page 131, 1st column, 1st paragraph is used to reset the capacity of the charge pump to a known reference value because Kawahara et al. teaches that doing so guarantees the accurate control of the voltage to the charge pump.

Fig. 1 has the same high level schematic as Fig. 1 of the claimed invention, and both figures don't get into a characterization of feedback loop arrangement. However, Kawahara et al. uses a reference feedback mechanism to control the large and medium charge pump output to the memory cells because the voltage and temperature compensation as discussed in page 129, 1st column and 1st & 2nd paragraphs can only achieved when the compensated values are evaluated against the output of the signals gathered at VP and VP output in order to control and improve the read and write times required by the flash memory.